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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/039,685

10/29/2001

Larry Lawson Jones

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9502

7590

05/24/2004

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EXAMINER

MYERS, PAUL R

ART UNIT

PAPER NUMBER

2112

3

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/039,685

Applicant(s)

JONES ET AL.

Examiner

Paul R. Myers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 recites the limitation "the personal computer interface" in lines 4 and 5. There is insufficient antecedent basis for this limitation in the claim. For further examining purposes the examiner will take "the personal computer interface" to be "the integrated Device Electronics interface".

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-44 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of U.S. Patent No. 6,438,638 in view of Lin et al PN 6,405,323.

Claim 1 of Patent Number 6,438,638 is identical to claim 1 of the current application except it includes claim language to a personal computer interface for transferring data to a

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personal computer. While claim 1 of the current application claims an IDE interface for transferring data to a personal computer. Lin et al teaches the use of an IDE controller (104 note ATA is synonymous with IDE) as an interface for transferring data to a personal computer from a CompactFlash (CF) card. It would have been obvious to a person of ordinary skill in the art at the time of the invention to have the personal computer interface be an IDE interface because this would have allowed for sector level segment defect mapping thus error handling (See Lin et al Column 1 lines 42-49).

5. Claims 1-44 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 and claims 1-23 of copending Application Nos. 10/002,567 and 10/167,925 in view of Lin et al. PN 6,405,323.

Claim 1 of application 10/002,567 and 10/167,925 are identical to claim 1 of the current application except it includes claim language to a personal computer interface for transferring data to a personal computer. While claim 1 of the current application claims an IDE interface for transferring data to a personal computer. Lin et al teaches the use of an IDE controller (104 note ATA is synonymous with IDE) as an interface for transferring data to a personal computer from a CompactFlash (CF) card. It would have been obvious to a person of ordinary skill in the art at the time of the invention to have the personal computer interface be an IDE interface because this would have allowed for sector level segment defect mapping thus error handling (See Lin et al Column 1 lines 42-49).

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al PN 6,405,323 in view of Hosaka et al PN 6,408,352.

In regards to claim 1: Lin et al teaches single-slot flash-card reader comprising: an Integrated Device Electronics (IDE) interface (interface between IDE converter and Host) for transferring data to a personal computer (Host); an IDE converter (104), coupled to the IDE interface, for converting flash-card interface to a format used by the personal computer interface (The ATA/IDE format); wherein the flash-card interface include a CompactFlash interface (interface between controller 104 and CF card 102); a CompactFlash connector (inherently the connector into which the CF card is inserted), coupled to the IDE converter, for receiving a CompactFlash card through a single slot in the single-slot flash-card reader, the CompactFlash connector making electrical connection with the CompactFlash card for signals in the CompactFlash interface. Lin et al does not teach the adapter or the multiple smaller interfaces having fewer pins. Hosaka et al teaches an adapter (1), having a physical shape to removable insert into a CompactFlash connector (Column 1 lines 24-37), the adapter having a mating CompactFlash connector that fits the CompactFlash connector, the adapter also having a smaller connector, the smaller connector for fitting to other flash-memory cards having the smaller interfaces (SmartMedia (SM), Miniature card (MC), MemoryStick (MS), MultiMedia card

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(MMC) Column 38-51); and wiring means, in the adapter, connected between the smaller connector and the mating CompactFlash connector, for directly connecting signals from the smaller connector in the smaller interface with signals in the mating CompactFlash connector (Column 12 lines 18-25); whereby the adapter allows the other flash-memory cards having the smaller interfaces to fit into the CompactFlash connector through the single slot (301). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the adapter of Hosaka et al in the slot of Lin et al because this would have allowed for support of a greater number of memory card standards thus allowing more differing types of devices to be accessed.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al PN 6,405,323 in view of Hosaka et al PN 6,408,352 as applied to claim 1 above, and further in view of Jigour et al PN 5,815,426.

In regards to claim 2: Hosaka et al teaches performing the simple pin configuration conversion necessary. However Hosaka et al is silent as to specific pins such as the claimed Card Select signal. Jigour et al teaches a memory card adapter for interfacing an insertable/removable digital memory in accordance with multiple protocols. Including a card select (DT) from the card interfaces to; wherein the controller includes card-detect means (DT input), coupled to sense the card select signals, for detecting presence of a flash-memory card inserted into the connector, whereby the controller detects presence of cards. It would have been obvious to include handling the standard card select signals in all the attached memory cards because this would have performed the pin conversion necessary.

Allowable Subject Matter

9. Claims 3-12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, and the double patenting rejection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
10. Claims 13-44 would be allowable if the double patenting rejection is overcome set forth in this Office.
11. The following is a statement of reasons for the indication of allowable subject matter: Hosaka et al teaches multiple different adapters for each type of memory card inserted with each adapter performing the conversion to compact flash and the IDE converter handling the conversion from CompactFlash to IDE thus there would be no need to inform the IDE converter of the type of card since the conversion has already been performed.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul R. Myers whose telephone number is 703 305 9656. The examiner can normally be reached on Mon-Thur 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703 305 4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PRM
May 20, 2004

PAUL R. MYERS
PRIMARY EXAMINER